

ISO 24187:2023-09 (E)

Principles for the analysis of microplastics present in the environment

Contents		Page
Foreword.....		iv
Introduction.....		v
1	Scope.....	1
2	Normative references.....	1
3	Terms and definitions.....	1
4	General aspects.....	2
5	General requirements for all analytical steps.....	2
6	Identification of appropriate detection methods.....	3
	6.1 General.....	3
	6.2 Detection techniques.....	4
	6.3 Identification of objective to be addressed.....	4
7	Sampling of water.....	5
	7.1 General.....	5
	7.2 Sample volume.....	5
	7.3 Mesh sizes.....	6
	7.4 Filter materials.....	6
8	Sampling of terrestrial, semiterrestrial and subhydric soils.....	6
	8.1 General.....	6
	8.2 Sampling of terrestrial soils.....	6
	8.3 Sampling of semiterrestrial soils.....	7
	8.4 Sampling of subhydric soils (sediments).....	7
9	Sampling of air.....	7
	9.1 Indoor air.....	7
	9.2 Outdoor air.....	7
10	Sampling of sludges and other similar materials.....	7
11	Sampling of mineral and other inorganic materials.....	8
12	Sampling of biota.....	8
13	Sample preparation.....	8
	13.1 General aspects.....	8
	13.2 Drying.....	9
	13.3 Milling and grinding.....	9
	13.4 Removal of inorganic matter.....	9
	13.5 Removal of organic matter.....	9
14	Data processing.....	10
	14.1 General aspects.....	10
	14.2 Single spectra/chromatogram interpretation.....	10
	14.3 Interpretation of large spectra/chromatogram data sets.....	10
15	Aspects of analytical quality assurance.....	11
	15.1 Reference materials.....	11
	15.2 Performance of interlaboratory comparison tests.....	12
	Annex A (informative) Advanced Data Processing.....	14
	Bibliography.....	20